

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS PATENT
OF THE UNITED STATES IS:

1. A charging device comprising:

a charging roller having a metal cylinder and an elastic

5 layer located on the metal cylinder;

a cleaner configured to clean the charging roller,

comprising:

an electroconductive brush roller comprising:

a roller having a shaft;

10 hair located overlying the roller,

wherein the hair includes a fiber which has a width
of from 0.1 to 20 denier, and a length of from 0.3 to 2.5 mm
and which is planted at a density of from 7,000 to 46,000
lines/cm², and

15 a member configured to impart substantially a same
potential as that of the charging roller to the
electroconductive brush roller when a bias voltage is applied
to the charging roller.

20 2. The charging device according to Claim 1, wherein the
electroconductive brush roller has an electric resistance of
from 10 to 10⁸ Ω.

25 3. The charging device according to Claim 1, wherein the
fiber is a nylon fiber.

4. The charging device according to Claim 1, wherein the

hair is subjected to a back coat treatment.

5. The charging device according to Claim 1, wherein the member is a blade spring configured to connect the shaft of the
5 roller of the electroconductive brush roller with a shaft of the charging roller.

10 6. The charging device according to Claim 1, wherein the electroconductive brush roller rotates together with the charging roller while being driven by the charging roller.

7. The charging device according to Claim 1, wherein the electroconductive brush roller rotates so as to counter the charging roller at a contact point thereof.

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8. The charging device according to Claim 1, wherein the cleaner further comprises an oscillating device configured to oscillate the electroconductive brush roller in a longitudinal direction thereof.

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9. The charging device according to Claim 1, wherein the cleaner further comprises a one-way clutch provided on the shaft of the roller.

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10. A cleaner for cleaning a charging roller, comprising:
an electroconductive brush roller comprising:
a roller having a shaft; and

hair located on the roller,
wherein the hair includes a fiber which has a width of from 0.1 to 20 denier, and a length of from 0.3 to 2.5 mm and which is planted at a density of from 7,000 to 46,000 lines/cm²,

5 and

a member configured to impart substantially a same potential as that of the charging roller to the electroconductive brush roller when a bias voltage is applied to the charging roller.

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11. A process cartridge comprising:
an image bearing member; and
a charger configured to charge the image bearing member,
wherein the charger is the charging device according to

15 Claim 1.

12. An image forming apparatus comprising:
an image bearing member;
a charger configured to charge the image bearing member;
20 a light irradiator configured to irradiate the charged image bearing member with imagewise light to form an electrostatic latent image on the image bearing member;
a developing device configured to develop the electrostatic latent image with a developer including a toner
25 to form a toner image on the image bearing member;
a transferring device configured to transfer the toner image onto a receiving material; and

a fixing device configured to fix the toner image on the receiving material,

wherein the charger is the charging device according to Claim 1.

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13. The image forming apparatus according to Claim 12, wherein the toner has a volume average particle diameter (D_v) of from 3 to 8 μm , and a ratio (D_v/D_n) of the volume average particle diameter (D_v) to a number average particle diameter $10 (D_n)$ of from 1.00 to 1.40.

14. The image forming apparatus according to Claim 12, wherein each of form factors SF-1 and SF-2 of the toner is greater than 100 and not greater than 180.

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15. The image forming apparatus according to Claim 12, wherein the toner is prepared by a method comprising:
dispersing or dissolving toner constituents including at least a polyester prepolymer having a functional group having 20 a nitrogen atom, a polyester resin, a colorant, and a release agent in an organic solvent to prepare a toner constituent liquid; and

dispersing the toner constituent liquid in an aqueous medium including a compound capable of reacting the functional 25 group of the polyester prepolymer to perform at least one of crosslinking reaction and elongation reaction of the polyester prepolymer and to form toner particles in the aqueous medium.

16. The image forming apparatus according to Claim 12,
wherein the toner satisfies the following relationships:

0.5 ≤ r₂/r₁ ≤ 1.0; and

5 0.7 ≤ r₃/r₂ ≤ 1.0,

wherein r₁ represents a major-axis particle diameter of the toner, r₂ represents a minor-axis particle diameter of the toner and r₃ represents a thickness of the toner, wherein r₃ ≤ r₂ ≤ r₁.

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